

**MAIN FEATURES**

|  |   |
|--|---|
| Highest quality and reliability.                           | Wide range of standard and optional equipment.  |
| ComAp IL-NT AMF25 controller.                              | Engine heater – ready to load just after start. |
| Ready to control MAINS – GENERATOR transfer switch.        | Drip tray,                                      |
| Configured for both manual and automatic mode (MRS + AMF). | Frame anticorrosion coating – Zr.               |
| Wide range of remote communications options.               | Brushless alternator.                           |
| Schneider NS type GCB.                                     |   |



The presented image is for illustration purpose only.

**GENERAL DATA**

|                                   |                    |                               |  |
|-----------------------------------|--------------------|-------------------------------|--|
| Code                              | F.0500.DA.F        | <b>Nominal power P.R.P.:</b>  | Prime power available in variable load application in accordance with ISO 8528, 10% overload capacity is available for a period of 1h within a 12-hour period of operation, but not more than 25 hours per year. Average power consumption should not exceed 70% PRP for each 24 hours of work. Limited to 500h of operation per year with 100% P.R.P power consumption. |
| Standby power E.S.P. [kVA] / [kW] | 550,0 / 440,0      | <b>Stand-by power E.S.P.:</b> | Standby power rating is applicable for supplying emergency power for the duration of a utility power interruption. No overload allowed, average power consumption should not exceed 70% ESP. Limited to 200h of operation per year including 25 hours with ESP.  |
| Prime power P.R.P. [kVA] / [kW]   | 500,0 / 400,0      | <b>Remark:</b>                | Ratings represent the genset performance capabilities to standard conditions specified in ISO 8528-1   |
| Prime current P.R.P [A]           | 722,0              | <b>Norms and directives:</b>  | <ul style="list-style-type: none"> <li>• Machinery directive 2006/42/EC</li> <li>• Low voltage directive 2014/35/EC</li> <li>• EC directive 2014/30/EC</li> <li>• Emission directive 97/68/EC</li> <li>• ISO 8528-1:2005, ISO 8528-5:2013</li> <li>• ISO 8528-13:2016</li> <li>• EN 60204-1</li> </ul>   |
| Frequency [Hz]                    | 50                 |                               |  |
| Voltage [V]                       | 400                |                               |  |
| Exhaust emission                  | non-emission       |                               |  |
| Fuel type                         | Diesel (EN 590)    |                               |  |
| Fuel consumption - 50% load [l/h] | 49,8               |                               |  |
| - 75% load [l/h]                  | 75,3               |                               |  |
| - 100% load [l/h]                 | 103,9              |                               |  |
| - 110% load [l/h]                 | 115,3              |                               |  |
| Standard fuel tank capacity [l]   | 720                |                               |  |
| Autonomy with 100% load [h]       | 6,2                |                               |  |
| Engine control voltage [V]        | 24                 |                               |  |
| Weight without fuel [kg]          | ~3390              |                               |  |
| Dimensions L x W x H [mm]         | 3266 x 1401 x 2106 |                               |  |
| Acoustic power Lwa [dBA]          | 120,7 ± 2,3        |                               |  |
| Acoustic pressure Lpa (7m) [dBA]  | 91,1 ± 2,3         |                               |  |

**STANDARD CONTROLLER**

Controller type: AMF 25

Easy to operate, intuitive graphical interface

Real time clock with battery supply

AMF function available

Flexible event based history with up to 119 events

3 Phase generator current measurement

Generator and Mains phase voltage measurement

Active/reactive power measurement

Active and reactive energy counter

Running hours counter

Battery charging alternator circuit connection

Fuel level measurement

Generator protection (over/under frequency, voltage, overcurrent)

Communication with ECU supporting CAN J1939 standard

Communication interface RS 485 and RS 232 supporting Modbus RTU (IL-NT RS232-485 module required)

GSM modem / wireless internet (IL-NT GPRS module required)

Internet/Ethernet communication (IB-Lite module required)

InteliMonitor software for single gen-set view

WebSupervisor software for Android mobile devices or PC's for fleet management

Active SMS or e-mail (IL-NT GPRS or IB-Lite module required)


**ENGINE**

|                             |                  |
|-----------------------------|------------------|
| Brand                       | Doosan           |
| Type                        | DP158LD          |
| Made in                     | South Korea      |
| Engine power [kW]           | 448,0            |
| Emission standard*          | non-emission     |
| Rotation per minute [rpm]   | 1500             |
| Engine governor             | electronic       |
| Governor class**            | G2               |
| Displacement [l]            | 14,6             |
| No of cylinder              | 8                |
| Fuel system                 | direct injection |
| Electrical system [V]       | 24               |
| Cooling system capacity [l] | 79,0             |
| Oil pan capacity [l]        | 22,0             |
| Fuel type                   | Diesel (EN 590)  |

\* According directive 97/68/EC non road mobile machinery engine emission.

\*\* According ISO 8528-5:2013

**ALTERNATOR**

|                                    |                      |
|------------------------------------|----------------------|
| Nominal Voltage [V]                | 400                  |
| Nominal power factor (cos phi)     | 0,8                  |
| Ambient temperature, altitude      | 40 °C, 1000m a.m.s.l |
| Nominal Power [kVA]                | 500,0                |
| IP protection                      | IP 23                |
| No of bearing                      | single bearing       |
| Coupling                           | direct               |
| Technology                         | brushless            |
| Short circuit maintaining capacity | 270% 10s             |
| Efficiency [%]                     | 93,9                 |
| Insulation class                   | H                    |
| Total harmonic content THD [%]     | 1,5                  |
| Reactance Xd'' [%]                 | 15,2                 |
| Voltage regulator type             | DVR, digital         |
| Voltage measurement                | 3 phases             |
| Voltage accuracy [%]               | +/- 0,25             |
| AVR supply system                  | auxiliary winding    |
| AVR supply optional                | PMG                  |
| Made in                            | EU                   |

**FOCUSSED ON GENERATORS ONLY****Power Generator FDF 500 D****STANDARD EQUIPMENT****OPTIONAL EQUIPMENT**

|  |   |  |   |
|--|---|--|---|
| Doosan DP158LD engine                      | ✓ | Oil draining hand pump                             | ✓ |
| Electronic engine speed governor           | ✓ | Battery disconnection switch                       | ✓ |
| Oil low pressure switch                    | ✓ | GCB 4P Schneider NS Micrologic 2.0                 | ✓ |
| Oil pressure sensor                        | ✓ | Power Lock type power output                       | ✓ |
| Engine high temperature switch             | ✓ | Power socket box                                   | ✓ |
| Engine high temperature sensor             | ✓ | Transfer switch controlled by generator controller | ✓ |
| Engine preheating with thermostat          | ✓ | Transfer switch with ATS controller                | ✓ |
| Engine oil Titan Cargo 15W40               | ✓ | GPRS communication card                            | ✓ |
| Fuel filter with water separator           | ✓ | Ethernet card                                      | ✓ |
| Coolant Fuchs Maintain Fricofin HDD Premix | ✓ | RS 485, RS 232 card                                | ✓ |
| Starting batteries 2x180 Ah                | ✓ | Remote display                                     | ✓ |
| Battery charger                            | ✓ | Fuel and retention pump                            | ✓ |
| GCB Schneider NS800 3P +Micrologic 2.0     | ✓ | Non-standard fuel tank size                        | ✓ |
| GCB shunt release coil                     | ✓ | External fuel tank 1 000 – 10 000 l                | ✓ |
| Bar connection                             | ✓ | 3-way valve for external fuel tank connection      | ✓ |
| Controller ComAp IL-NT-AMF25               | ✓ | Fuel tank filling pump and shut-off valve          | ✓ |
| Controller switch                          | ✓ |  |   |
| Acoustic alarm                             | ✓ |  |   |
| Emergency stop button                      | ✓ |  |   |
| Welded frame with fuel tank                | ✓ |  |   |
| Fuel level measurement                     | ✓ |  |   |
| Exhaust compensator                        | ✓ |  |   |
| Engine and alternator vibro isolators      | ✓ |  |   |
| Silencer delivered with the generator      | ✓ |  |   |
| Transportation brackets                    | ✓ |  |   |

**FOCUSED ON GENERATORS ONLY****Power Generator FDF 500 D****INSTALLATION GUIDELINES**

|  |                                  |
|--|----------------------------------|
| Power terminal                                       | Busbar                           |
| Recommended cable for up to 30m power cable way      | Flexible 2x5x240 mm <sup>2</sup> |
| Recommended cable for do 30m generator heater supply | Flexible 3x2,5 mm <sup>2</sup>   |

\*For additional cable connection with FOGO ATS see ATS wiring diagram

|  |            |
|--|------------|
| Exhaust pipe min diameter (max. 7 m, 4 bends)  | 2x114,3 mm |
| Exhaust pipe min diameter (max. 15 m, 4 bends) | 2x133 mm   |

**MAINTENANCE GUIDELINES**

|                                     |   |
|-------------------------------------|---|
| Fuel filters replacement            | 200 h / 1 year  |
| Oil replacement                     | After first 50h, then every 200 h / 1 year              |
| Oil filters replacement             | After first 50h, then every 200 h / 1 year              |
| Coolant replacement                 | 1000 h / 2 years  |
| Battery replacement                 | 2 years   |
| Electrical installation supervising | According to local requirements, at least once per year |

**WARRANTY**

|                            |                                    |
|----------------------------|------------------------------------|
| Continuous work generators | 12 months up to 1000 working hours |
|----------------------------|------------------------------------|

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Datasheet could be changed without notification

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